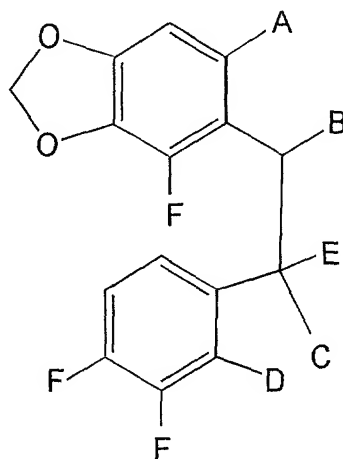


What is claimed is:

1. A delivery system for the treatment of neoplastic diseases, comprising a composition comprising a compound of the formula



wherein: A is

- (i)  $(\text{CH}_2)_n\text{-N}-\text{C}(\text{O})\text{O}-\text{C}_{1-6}\text{ alkyl}$ ; and W is  $\text{C}_{1-6}\text{ alkyl}$ ; or

- (ii)  $(\text{CH}_2)_2\text{-N}-$  and forms a six membered ring  
Y  
with B, said ring containing one nitrogen;

Y is

- (a)  $\text{C}_{1-6}\text{ alkyl}$ , or H;
- (b)  $\text{C}(\text{O})-\text{C}_{1-6}\text{ alkyl}$ ;
- (c)  $\text{CH}_2\text{CH}(\text{OH})\text{-CH}_2\text{-Z}$ , wherein Z is  $\text{C}_{1-6}\text{ alkyl}$  or  $\text{O}-\text{C}_{1-6}\text{ alkyl}$ ;
- (d) aryl; or
- (e) heterocycle;

B is a single bond, OH or halo;

C is -OH, -CH<sub>2</sub>-, -O-, or forms a 5-membered lactone or lactam ring with D; and

D is:

(i) -OH, -CH<sub>2</sub>-halo, -CH(0)-, -COOH, -C(O)-O-C<sub>1-6</sub> alkyl, -  
(CH<sub>2</sub>)<sub>n</sub>-,  
-CHOH-, wherein n is an integer and is 1,2, or 3; or

(ii) forms a 5-membered lactone or lactam ring with C;

E is -H or -CH<sub>3</sub>; and

F is -OH or -OCH<sub>3</sub>,

or pharmaceutically acceptable salts thereof; and

a controlled-release mechanism,

whereby the delivery system enhances the delivery of the composition to a patient in need thereof.

2. The delivery system of claim 1, wherein the controlled-release mechanism is selected from the group consisting of implantable devices, delivery pumps, wafers, biodegradable polymers, and combinations thereof.

3. The delivery system of claim 1, wherein the controlled-release mechanism is a topical formulation.

4. The delivery system of claim 3, where in the topical formulation is selected from the group consisting of gels, lotions, patches, iontophoresis solutions, and

combinations thereof.

5. The delivery system claim 1, wherein the controlled-release mechanism comprises a modified form of the compound.

6. The delivery system of claim 1, wherein the controlled-release mechanism comprises a modification that enhances the permeability of the composition through a patient's blood-brain barrier.

7. The delivery system of claim 6, wherein the controlled-release mechanism comprises the delivery of a substance that at least temporarily shrinks the cells of the blood-brain barrier to allow increased passage of the composition.

8. The delivery system of claim 1, wherein the compound is modified by the addition of a peptide drug transporter.

9. The delivery system of claim 1, wherein the controlled-release mechanism comprises a modification to the compound to enhance its tumor targeting ability.

10. The delivery system of claim 9, wherein the compound is modified by packaging the compound into an agent capable of binding to tumor cell receptors such that the compound is adapted to selectively enter tumor cells.

11. The delivery system of claim 9, wherein the compound is modified by liposomal encapsulation.

12. The delivery system of claim 11, wherein the compound is complexed with cyclodextrins and encapsulated by liposomes.

13. The delivery system of claim 9, wherein the compound is modified with tumor specific antibodies or ligands for tumor specific proteins.

14. The delivery system of claim 9, wherein the compound comprises an adduct for the compound or its derivatives for tumor targeting purposes.

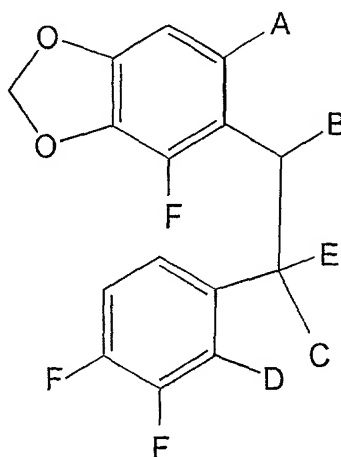
15. The delivery system of claim 1, wherein the composition is delivered via oral delivery, rectal delivery, nasal delivery, parenteral delivery, direct tissue injection, topical delivery, intracranial delivery, or combinations thereof.

16. The delivery system of claim 15, wherein the parenteral delivery comprises subcutaneous delivery, intravenous delivery, intramuscular delivery, intraperitoneal delivery, infrasternal injection, or infusion.

17. The delivery system of claim 1, wherein the neoplastic disease is selected

from the group consisting of cancer of the colon, non-small cell lung cancer, cancer of the brain, ovarian cancer, cancer of the kidney, cancer of the prostate, leukemia, breast cancer, skin cancer, melanoma, and cancer of the bladder.

18. The method of claim 1, wherein the compound is noscapine.
19. A method for the treatment of neoplastic diseases, comprising:
  - (a) administering to a mammal in need of such treatment an effective amount of a composition comprising a compound of the formula



wherein: A is

- (i)  $(\text{CH}_2)_n\text{-N}-\underset{\text{W}}{\text{C}}(\text{O})\text{O}-\text{C}_{1-6}\text{ alkyl}$ ; and W is  $\text{C}_{1-6}\text{ alkyl}$ ; or
- (ii)  $(\text{CH}_2)_2\text{-N}-\underset{\text{Y}}{\text{C}}$  - and forms a six membered ring  
with B, said ring containing one nitrogen;

Y is

- (a) C<sub>1-6</sub> alkyl, or H;
- (b) C(O)-C<sub>1-6</sub> alkyl;
- (c)  $\text{CH}_2\underset{\text{OH}}{\text{CH}}\text{-CH}_2\text{-Z}$ , wherein Z is C<sub>1-6</sub> alkyl or O-C<sub>1-6</sub> alkyl;
- (d) aryl; or
- (e) heterocycle;

B is a single bond, OH or halo;

C is -OH, -CH<sub>2</sub>-, -O-, or forms a 5-membered lactone or lactam ring with D; and

D is:

- (i) -OH, -CH<sub>2</sub>-halo, -CH(0)-, -COOH, -C(O)-O-C<sub>1-6</sub> alkyl, -  
(CH<sub>2</sub>)<sub>n</sub>-,  
-CHOH-, wherein n is an integer and is 1,2, or 3; or

- (ii) forms a 5-membered lactone or lactam ring with C;

E is -H or -CH<sub>3</sub>; and

F is -OH or -OCH<sub>3</sub>,

or pharmaceutically acceptable salts thereof, in combination with another tumor therapy for the treatment or prevention of tumors.

20. The method of claim 19, wherein the another tumor therapy comprises radiation therapy, phototherapy, surgical resection, immunotherapy, vaccination, interferon treatment, chemotherapy, stereotactic surgery, or combinations thereof.

21. The method of claim 19, wherein the composition is used as a preventive

measure after surgical excision.

22. The method of claim 19, wherein the compound is noscapine.

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